46

RAW SEQUENCE LISTING PATENT APPLICATION US/08/560,024

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This Raw Listing contains the General Information Section and up to the first 5 pages.

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1 SEQUENCE LISTING 2 3 General Information: (1) 4 5 (i) APPLICANT: Chen, Yao-Tseng; Stockert, Elisabeth; 6 Chen, Yachi; Garin-Chesa, Pilar; Rettig, Wolfgang J.; 7 van der Bruggen, Pierre; Boon-Falleur, Thierry; 8 Old, Lloyd J. 9 10 (11) TITLE OF INVENTION: MONOCLONAL ANTIBODIES WHICH BIND TO TUMOR REJECTION ANTIGEN PRECURSOR MAGE-1, RECOMBINANT MAGE-1, 11 AND MAGE-1 DERIVED IMMUNOGENIC PEPTIDES 12 13 (iii) NUMBER OF SEQUENCES: 4 14 15 16 (iv) CORRESPONDENCE ADDRESS: 17 (A) ADDRESSEE: Felfe & Lynch 18 (B) STREET: 805 Third Avenue (C) CITY: New York City 19 (D) STATE: New York 20 21 (F) ZIP: 10022 22 23 (V) COMPUTER READABLE FORM: 24 (A) MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage 25 (B) COMPUTER: IBM 26 (C) OPERATING SYSTEM: PC-DOS 27 (D) SOFTWARE: Wordperfect 28 29 (vi) CURRENT APPLICATION DATA: 30 (A) APPLICATION NUMBER: 08/560,024 31 (B) FILING DATE: 32 (C) CLASSIFICATION: 33 34 (vii) PRIOR APPLICATION DATA: 35 (A) APPLICATION NUMBER: US/08/190,411 36 (B) FILING DATE: 01-FEBRUARY-1994 37 38 (A) APPLICATION NUMBER: 037,230 39 (B) FILING DATE: 26-MARCH-1993 40 41 (vii) PRIOR APPLICATION DATA: 42 (A) APPLICATION NUMBER: PCT/US92/04354 43 (B) FILING DATE: 22-MAY-1992 44 (vii) PRIOR APPLICATION DATA: 45

07/807,043

(A) APPLICATION NUMBER:

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47
                (B) FILING DATE: 12-DECEMBER-1991
48
49
         (vii) PRIOR APPLICATION DATA:
50
                (A) APPLICATION NUMBER: 07/764,364
51
                (B) FILING DATE: 23-SEPTEMBER-1991
52
53
         (vii) PRIOR APPLICATION DATA:
54
                (A) APPLICATION NUMBER: 07/728,838
55
                (b) FILING DATE: 9-JULY-1991
56
57
58
         (vii) PRIOR APPLICATION DATA:
59
               (A) APPLICATION NUMBER: 07/705,702
60
               (B) FILING DATE: 23-MAY-1991
61
62
         (viii) ATTORNEY/AGENT INFORMATION:
63
               (A) NAME: Hanson, Norman D.
               (B) REGISTRATION NUMBER: 30,946
64
65
               (C) REFERENCE/DOCKET NUMBER: LUD 5354
66
67
         (ix) TELECOMMUNICATION INFORMATION:
68
               (A) TELEPHONE: (212) 688-9200
69
               (B) TELEFAX: (212) 838-3884
70
71
72
73
74
    (2) INFORMATION FOR SEQ ID NO: 1:
75
         (i) SEQUENCE CHARACTERISTICS:
76
               (A) LENGTH: 5674 base pairs
77
               (B) TYPE:
                          nucleic acid
78
               (C) STRANDEDNESS: single
79
               (D) TOPOLOGY: linear
         (ii) MOLECULE TYPE: genomic DNA
80
81
         (ix) FEATURE:
82
               (A) NAME/KEY: MAGE-1 gene
83
         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
84
85
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86
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    TACGCCACCC ATCCAAACAT CTTCACGCTC ACCCCCAGCC CAAGCCAGGC
87
                                                                   100
88
    AGAATCCGGT TCCACCCCTG CTCTCAACCC AGGGAAGCCC AGGTGCCCAG
                                                                   150
    ATGTGACGCC ACTGACTTGA GCATTAGTGG TTAGAGAGAA GCGAGGTTTT
89
                                                                   200
90
    CGGTCTGAGG GGCGGCTTGA GATCGGTGGA GGGAAGCGGG CCCAGCTCTG
                                                                   250
    TAAGGAGGCA AGGTGACATG CTGAGGGAGG ACTGAGGACC CACTTACCCC
91
                                                                   300
92
    AGATAGAGGA CCCCAAATAA TCCCTTCATG CCAGTCCTGG ACCATCTGGT
                                                                   350
93
    GGTGGACTTC TCAGGCTGGG CCACCCCCAG CCCCCTTGCT GCTTAAACCA
                                                                   400
94
    CTGGGGACTC GAAGTCAGAG CTCCGTGTGA TCAGGGAAGG GCTGCTTAGG
95
    AGAGGGCAGC GTCCAGGCTC TGCCAGACAT CATGCTCAGG ATTCTCAAGG
    AGGGCTGAGG GTCCCTAAGA CCCCACTCCC GTGACCCAAC CCCCACTCCA
96
                                                                   550
97
    ATGCTCACTC CCGTGACCCA ACCCCCTCTT CATTGTCATT CCAACCCCCA
                                                                   600
    CCCCACATCC CCCACCCCAT CCCTCAACCC TGATGCCCAT CCGCCCAGCC~
98
                                                                   650
    ATTCCACCCT CACCCCCACC CCCACCCCCA CGCCCACTCC CACCCCCACC
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101					TTCCATTCTG/	800
102	AGGGACGGCG	TAGAGTTCGG	CCGAAGGAAC	CTGACCCAGG	CTCTGTGAGG/	850
103	AGGCAAGGTG	AGAGGCTGAG	GGAGGACTGA	GGACCCCGCC	ACTCCAAATA~	900
104					CTGGCCCACC	950
105	CGCGGGAAGA	CGTCTCAGCC	TGGGCTGCCC	CCAGACCCCT	GCTCCAAAAG~	1000
106					CAGAGGTTGC	1050
107	TGTGACCAGG	GCAGGACTGG	TTAGGAGAGG	GCAGGGCACA	GGCTCTGCCA~	1100
108	GGCATCAAGA	TCAGCACCCA	AGAGGGAGGG	CTGTGGGCCC	CCAAGACTGC	1150
109	ACTCCAATCC	CCACTCCCAC	CCCATTCGCA	TTCCCATTCC	CCACCCAACC	1200
110	CCCATCTCCT	CAGCTACACC	TCCACCCCCA	TCCCTACTCC	TACTCCGTCA/	1250
111	CCTGACCACC	ACCCTCCAGC	CCCAGCACCA	GCCCCAACCC	TTCTGCCACO/	1300
112	TCACCCTCAC	TGCCCCCAAC	CCCACCCTCA	TCTCTCTCAT	GTGCCCCACT ✓	1350
113	CCCATCGCCT	CCCCCATTCT	GGCAGAATCC	GGTTTGCCCC	TGCTCTCAAC	1400
114	CCAGGGAAGC	CCTGGTAGGC	CCGATGTGAA	ACCACTGACT	TGAACCTCAC	1450
115	AGATCTGAGA	GAAGCCAGGT	TCATTTAATG	GTTCTGAGGG	GCGGCTTGAG'	1500
116	ATCCACTGAG	GGGAGTGGTT	TTAGGCTCTG	TGAGGAGGCA	AGGTGAGATG/	1550
117	CTGAGGGAGG	ACTGAGGAGG	CACACACCCC	AGGTAGATGG	CCCCAAAATG/	1600
118	ATCCAGTACC	ACCCCTGCTG	CCAGCCCTGG	ACCACCCGGC	CAGGACAGAT/	1650
119	GTCTCAGCTG	GACCACCCC	CGTCCCGTCC	CACTGCCACT	TAACCCACAG/	1700
120	GGCAATCTGT	AGTCATAGCT	TATGTGACCG	GGGCAGGGTT	GGTCAGGAGA/	1750
121	GGCAGGGCCC	AGGCATCAAG	GTCCAGCATC	CGCCCGGCAT	TAGGGTCAGG\(\sigma\)	1800
122	ACCCTGGGAG	GGAACTGAGG	GTTCCCCACC	CACACCTGTC	TCCTCATCTC/	1850
123	CACCGCCACC	CCACTCACAT	TCCCATACCT	ACCCCCTACC	CCCAACCTCA	1900
124	TCTTGTCAGA	ATCCCTGCTG	TCAACCCACG	GAAGCCACGG	GAATGGCGGC/	1950
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126	GCTTGAACAG	GGCCTCAGGG	GAGCAGAGGG	AGGGCCCTAC	TGCGAGATGA/	2050
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128	ACTGAGGCTG	CCACTTCTGG	CCTCAAGAAT	CAGAACGATG	GGGACTCAGA	2150
129	TTGCATGGGG	GTGGGACCCA	GGCCTGCAAG	GCTTACGCGG	AGGAAGAGGA _V	2200
130	GGGAGGACTC	AGGGGACCTT	GGAATCCAGA	TCAGTGTGGA	CCTCGGCCCTV	2250
131	GAGAGGTCCA	GGGCACGGTG	GCCACATATG	GCCCATATTT	CCTGCATCTTV	2300
132	TGAGGTGACA	GGACAGAGCT	GTGGTCTGAG	AAGTGGGGCC	TCAGGTCAAC/	2350
133	AGAGGGAGGA	GTTCCAGGAT	CCATATGGCC	CAAGATGTGC	CCCCTTCATG/	2400
134	AGGACTGGGG	ATATCCCCGG	CTCAGAAAGA	AGGGACTCCA	CACAGTCTGG/	2450
135	CTGTCCCCTT	TTAGTAGCTC	TAGGGGGACC	AGATCAGGGA	TGGCGGTATG >	2500
136					CCTCAGGGAG/	2550
137	ATGGGGTCTT	GGGGTAAAGG	GGGGATGTCT	ACTCATGTCA	GGGAATTGGG/	2600
138					GAGACAGACA✓	2650
139	AGGCTATTGG	AATCCACACC	CCAGAACCAA	AGGGGTCAGC	CCTGGACACC/	2700
140					TCTGGGGCAG	2750
141	GTGAGGACCT	CATTCTCAGA	GGGTGACTCA	GGTCAACGTA	GGGACCCCCA/	2800
142	TCTGGTCTAA	AGACAGAGCG	GTCCCAGGAT	CTGCCATGCG	TTCGGGTGAG	2850
143					CTGAGGGAGA✓	2900
144	CTGCACAGAA	ATCAGCCCTG	CCCCTGCTGT	CACCCCAGAG	AGCATGGGCT V	2950
145	GGGCCGTCTG	CCGAGGTCCT	TCCGTTATCC	TGGGATCATT	GATGTCAGGG ✓	3000
146	ACGGGGAGGC	CTTGGTCTGA	GAAGGCTGCG	CTCAGGTCAG	TAGAGGGAGC~	3050
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148	CAGGACACAT	TAATTCCAAT	GAATTTTGAT	ATCTCTTGCT	GCCCTTCCCC	3150
149	AAGGACCTAG	GCACGTGTGG	CCAGATGTTT	GTCCCCTCCT	GTCCTTCCATV	3200
150	TCCTTATCAT	GGATGTGAAC	TCTTGATTTG	GATTTCTCAG	ACCAGCAAAA/	3250
151	GGGCAGGATC	CAGGCCCTGC	CAGGAAAAAT	ATAAGGGCCC	TGCGTGAGAA	3300
152	CAGAGGGGGT	CATCCACTGC	ATGAGAGTGG	GGATGTCACA	GAGTCCAGCC <	3350
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153	CACCCTCCTG GTAGCACTGA GAAGCCAGGG CTGTGCTTGC GGTCTGCACCV	3400
154	CTGAGGGCCC GTGGATTCCT CTTCCTGGAG CTCCAGGAAC CAGGCAGTGAV	3450
155	GGCCTTGGTC TGAGACAGTA TCCTCAGGTC ACAGAGCAGA GGATGCACAG✓	3500
156	GGTGTGCCAG CAGTGAATGT TTGCCCTGAA TGCACACCAA GGGCCCCACC	3550
157	TGCCACAGGA CACATAGGAC TCCACAGAGT CTGGCCTCAC CTCCCTACTG	
158	TCAGTCCTGT AGAATCGACC TCTGCTGGCC GGCTGTACCC TGAGTACCCT	
159	CTCACTTCCT CCTTCAGGTT TTCAGGGGAC AGGCCAACCC AGAGGACAGG	3700
160	ATTCCTGGA GGCCACAGAG GAGCACCAAG GAGAAGATCT GTAAGTAGGCV	3750
161	CTTTGTTAGA GTCTCCAAGG TTCAGTTCTC AGCTGAGGCC TCTCACACACAC	3800
162	TCCCTCTCC CCCAGGCCTG TGGGTCTTCA TTGCCCAGCT CCTGCCCACA	3850
163	CTCCTGCCTG CTGCCCTGAC GAGAGTCATC	3880
164	ATG TCT CTT GAG CAG AGG AGT CTG CAC TGC AAG CCT GAG GAA	3922
165	GCC CTT GAG GCC CAA CAA GAG GCC CTG GGC CTG GTG TGT GTG	3964
166	CAG GCT GCC ACC TCC TCC TCT CCT CTG GTC CTG GGC ACC	4006
167	CTG GAG GAG GTG CCC ACT GCT GGG TCA ACA GAT CCT CCC CAG	4048
168	AGT CCT CAG GGA GCC TCC GCC TTT CCC ACT ACC ATC AAC TTC	4090
169	ACT CGA CAG AGG CAA CCC AGT GAG GGT TCC AGC AGC CGT GAA	4132
170	GAG GAG GGG CCA AGC ACC TCT TGT ATC CTG GAG TCC TTG TTC	
	CGA GCA GTA ATC ACT AAG AAG GTG GCT GAT TTG GTT GGT TTT	4174
171 172		4216
	CTG CTC CTC AAA TAT CGA GCC AGG GAG CCA GTC ACA AAG GCA	4258
173	GAA ATG CTG GAG AGT GTC ATC AAA AAT TAC AAG CAC TGT TTT	4300
174	CCT GAG ATC TTC GGC AAA GCC TCT GAG TCC TTG CAG CTG GTC TTT GGC ATT GAC GTG AAG GAA GCA GAC CCC ACC GGC CAC TCC	
175		4384
176	TAT GTC CTT GTC ACC TGC CTA GGT CTC TCC TAT GAT GGC CTG	4426
177	CTG GGT GAT AAT CAG ATC ATG CCC AAG ACA GGC TTC CTG ATA	4468
178	ATT GTC CTG GTC ATG ATT GCA ATG GAG GGC GGC CAT GCT CCT	4510
179	GAG GAG GAA ATC TGG GAG GAG CTG AGT GTG ATG GAG GTG TAT	4552
180	GAT GGG AGG GAG CAC AGT GCC TAT GGG GAG CCC AGG AAG CTG	4594
181	CTC ACC CAA GAT TTG GTG CAG GAA AAG TAC CTG GAG TAC GGC	4636
182	AGG TGC CGG ACA GTG ATC CCG CAC GCT ATG AGT TCC TGT GGG	4678
183	GTC CAA GGG CCC TCG CTG AAA CCA GCT ATG TGA	4711
184	AAGTCCTTGA GTATGTGATC AAGGTCAGTG CAAGAGTTC	4750
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186	GGAGTCTGAG CATGAGTTGC AGCCAAGGCC AGTGGGAGGG GGACTGGGCC	4850
187		4900
188	TGAGGCCCAT TCTTCACTCT GAAGAGAGCG GTCAGTGTTC TCAGTAGTAG	4950
189	GTTTCTGTTC TATTGGGTGA CTTGGAGATT TATCTTTGTT CTCTTTTGGA	5000
190	ATTGTTCAAA TGTTTTTTT TAAGGGATGG TTGAATGAAC TTCAGCATCC	5050
191	AAGTTTATGA ATGACAGCAG TCACACAGTT CTGTGTATAT AGTTTAAGGG	5100
192		5150
193	TTGGGATAAT AACAGCAGTG GAATAAGTAC TTAGAAATGT GAAAAATGAG	5200
194	CAGTAAAATA GATGAGATAA AGAACTAAAG AAATTAAGAG ATAGTCAATT	5250
195	CTTGCCTTAT ACCTCAGTCT ATTCTGTAAA ATTTTTAAAG ATATATGCAT	5300
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197	TAAAGAATTC TTCCTGTTCA CTGGCTCTTT TCTTCTCCAT GCACTGAGCA	5400
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199	AGACTCATAC CCACCCATAG GGTCGTAGAG TCTAGGAGCT GCAGTCACGT	5500
200	AATCGAGGTG GCAAGATGTC CTCTAAAGAT GTAGGGAAAA GTGAGAGAGG	5550
201	GGTGAGGGTG TGGGGCTCCG GGTGAGAGTG GTGGAGTGTC AATGCCCTGA	5600
202	GCTGGGGCAT TTTGGGCTTT GGGAAACTGC AGTTCCTTCT GGGGGAGCTG	5650
203	ATTGTAATGA TCTTGGGTGG ATCC	5674
204		

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206
207
     (2) INFORMATION FOR SEQ ID NO: 2:
208
          (i) SEQUENCE CHARACTERISTICS:
209
                (A) LENGTH: 14 amino acid residues
210
             (B) TYPE: amino acid
          (D) TOPOLOGY: linear (ii) MOLECULE TYPE: protein
211
212
213
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
214
215
216
     Ile Asn Phe Thr Arg Gln Arg Gln Pro Ser Glu Gly Ser Ser
217
218
219
220
     (2) INFORMATION FOR SEQ ID NO: 3:
221
          (i) SEQUENCE CHARACTERISTICS:
222
                (A) LENGTH: 12 amino acid residues
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                (B) TYPE: amino acid
224
                (D) TOPOLOGY: linear
          (ii) MOLECULE TYPE: protein
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226
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
227
228
229
     Leu Phe Arg Ala Val Ile Thr Lys Lys Val Ala Asp
230
                      5
231
232
233
     (2) INFORMATION FOR SEQ ID NO: 4:
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235
          (i) SEQUENCE CHARACTERISTICS:
236
                (A) LENGTH: 12 amino acid residues
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                (B) TYPE: amino acid
238
               (D) TOPOLOGY: linear
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          (ii) MOLECULE TYPE: protein
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          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
241
242
243 Asp Val Lys Glu Ala Asp Pro Thr Gly His Ser Tyr
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245
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